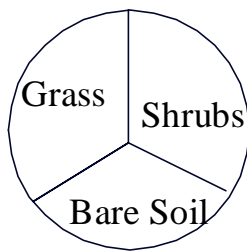




THE COVEY HEADQUARTERS

Volume 7 Issue 1 Spring 2008

This newsletter is aimed at cooperators and sportspeople in Missouri to provide information on restoring quail. This is a joint effort of the Missouri Department of Conservation, USDA-Natural Resources Conservation Service, and University of Missouri Extension. If you would like to be removed from this mailing list or have suggestions for future articles please contact jeff.powelson@mdc.mo.gov or 816-232-6555 x122 or write to the address shown.



The name of this newsletter is taken from an old concept.....that a quail covey operates from a headquarters (shrubby cover). If the rest of the covey's habitat needs are nearby, a covey should be present. We are encouraging landowners to manage their quail habitat according to this concept. Use **shrubs** as the cornerstone for your quail management efforts. Manage for a **diverse grass, broadleaf weed and legume mixture and provide bare ground** with row crops, food plots or light disking **right next to** the shrubby area.

Hunters Seeing Positive Impact of Conservation Security Program

Bill White, Private Land Program Coordinator, Jefferson City, MO

The newest program in the suite of Farm Bill programs available in Missouri is the Conservation Security Program (CSP). CSP provides incentives for ag producers to address natural resource concerns on their farms. The more resources addressed the higher the incentive. Due to limited funding since 2004, the program has only been offered in eight watersheds in Missouri. But, from a wildlife standpoint, CSP has changed the landscape in such intensive agricultural regions as the Bootheel and mid-Missouri. An estimated 15 million linear feet of native grass field borders and an estimated 50,000 acres of rice field reflooding for migrating waterfowl has been established in the program. No other program has made this much of a difference for wildlife in such a short amount of time and in such a small geography. Just think of the habitat that could be in place today if enough money was available to apply this program statewide.

Scott County ag producer Patrick Hulshof says CSP should play a bigger role in the Farm Bill. "The CSP allows farmers to make a difference on the landscape for natural resources. And that is a part of the Farm Bill that gives the American taxpayers something to show for their money," he says.

Hulshof has used CSP to address water quality with precision agriculture techniques and more efficient irrigation systems. He addresses erosion with minimum-tillage techniques and addresses wildlife by planting field borders and center pivot corners to wildlife friendly grasses. Hulshof has witnessed the amazing quail response to the new habitat. "When we are working the fields we are seeing quail everywhere," he says.

"Initially, Patrick was not as interested in what CSP could do for quail but what CSP could do to help with applying variable rate nutrient application technology to his cropland," says Brian Shelton who works for Hulshof. But, now that Patrick has seen the quail response, he has gotten so excited that he joined Quail Unlimited and is keeping up with management of the CSP wildlife cover for the quail. He has hunted quail more the past few weeks than he has in the past 5 years."

Local quail hunter Mike Riley provided the dogs for an exceptional quail hunt of CSP cover in the Bootheel. "Before CSP came along I would find a covey during a typical half day hunt," he says. Riley was excited upon

finding 3 and 4 coveys in our half day hunts. "The average size of the coveys before CSP was about 8 birds, but today we are seeing mostly 15 bird coveys," Riley says.

One of the best times of this hunting experience was at the end of the day, when we found single birds scattered out over eight weedy acres of a center pivot irrigation corner which was planted to strips of native grass and food plots. It took us over 30 minutes to move through that small triangle of habitat, because Riley's English pointers probably pointed 10 different times on single birds. Too bad our shooting did not match the dog's hunting ability. But according to Mike the dogs are used to it! We got back to the truck all smiles, from a great end to a great hunt.



On each farm that we hunted we found birds and we found the first covey within the first 15 minutes of hunting on all but one farm. We averaged about one covey for each hour of hunting. As a comparison, the Missouri Department of Conservation (MDC) surveys from Southeast Missouri in the mid-1940s found hunters averaged five covey flushes per eight hour hunting day. CSP has made great strides to get us back to the way it was.

Hulshof and Shelton plan to further improve the habitat provided by CSP with edgefeathering in adjacent fencerows and woodlands. Without CSP, Patrick Hulshof would not have a newfound interest in quail and would not be thinking about what else he could do to help quail on his farm. Many other CSP participants feel the same way. A Saline County CSP farmer told MDC staff during a quail workshop that "I am managing for quail because of the CSP program. Had I not enrolled in the program, I would not be doing anything for quail."

If a CSP sign-up is conducted in 2008, it will most likely be the Lower Missouri-Crooked Watershed. This watershed includes portions of Caldwell, Carroll, Cass, Chariton, Clay, Clinton, Jackson, Johnson, Lafayette, Ray, and Saline Counties in Missouri and Johnson and Wyandotte in Kansas. Visit your local USDA Service Center to see if your farm falls within the watershed boundary and find out what you need to do to qualify for CSP.

Free Private Land Care DVD Now Available

The Missouri Department of Conservation has a limited supply of Private Land Care DVD's. This DVD includes information on how to improve wildlife habitat on your land. Topics include light disking/herbicide spraying, how to plant food plots, important plants for quail, quail habitat components, broadcast sprayer/seeder calibration, covey headquarter shrub planting, eradicating fescue and sericea lespedeza, building an ephemeral pool, and edge feathering. If you would like this free DVD please send a request to Travis Dinsdale at travis.dinsdale@mo.usda.gov or write to the address on the front of this newsletter. Please allow 4-6 weeks for delivery.

Did You Know???

Farming is a vital activity on many Missouri Department of Conservation Areas. In fact, the department has approximately 68,000 acres of public land that is leased to raise crops, graze cattle, or hay by over 360 permittee farmers. The combination of farming and active wildlife management has helped improve quail habitat on many conservation areas.

Good News – Food Plots allowed on CP25

Food plots are now allowed on the Conservation Reserve Program (CRP) CP25 practice. You must visit your local USDA Service Center and modify your conservation plan before any work can begin. There are a few basic requirements for food plots on CRP –

- *Food plots must be a minimum of ¼ acre in size
- *Food plots can be no larger than 5 acres
- *Food plots can cover no more than 10% of any one field and no more than 10% of the total contract acres
- *If food plots are relocated or abandoned, you must re-plant previous CRP cover at your own expense
- *Up to ½ of the food plots on the contract acres may be left idle for one year to provide annual plants

CP33 Provides Habitat for Quail and Protects Soil and Water Resources

Lonnie Boring, Resource Scientist, Kirksville, MO

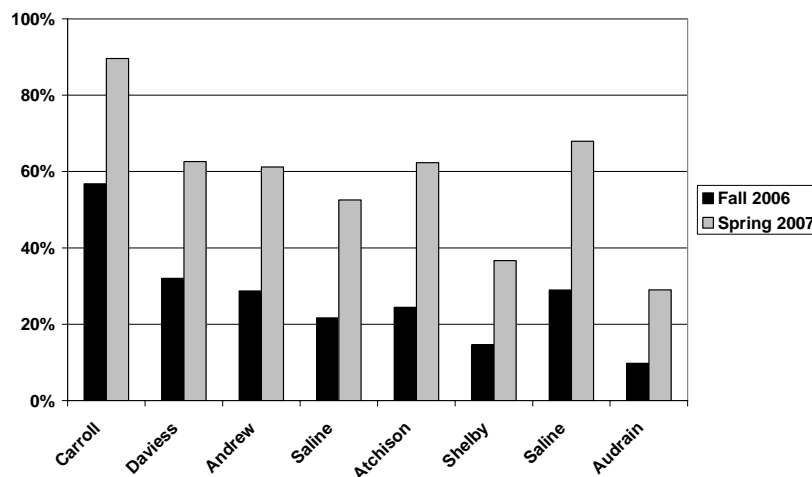
The Missouri Department of Conservation has teamed with the US Department of Agriculture Natural Resources Conservation Service to conduct an assessment of CP33 buffers in Missouri. CP33 establishes buffers around the edge of existing crop fields to provide cover and food for quail and other upland birds. CP33 buffers range from 30 to 120 feet wide and are usually planted with a mixture of native plants. Missouri has 32,500 acres eligible for CP33 allocation.

In addition to investigating the response of quail and grassland birds to CP33 buffers, researchers are monitoring vegetation establishment and soil erosion. Quail require bare ground; consequently, CP33 seeding rates are reduced. The reduced seeding rate has caused some to voice concerns over potential erosion within the buffers. Researchers are investigating these concerns over a two-year period at eight farms located across northern Missouri (see map at right).



Information on vegetation and soil erosion has been collected during the first year of this two-year study. The researchers are collecting information on the percentage of bare ground within the buffers as well as the plant species present and their growth. This information is used in conjunction with site soil and slope characteristics to help the researchers assess the potential for soil erosion to occur within the buffer.

Percent Bare Ground



Each site is unique, but seasonal trends are the same. The percent of bare ground peaks in the spring and is reduced in the fall (see chart at left). This corresponds to plant growth and decay over the growing season. During the dormant season, dead plant material that covers the soil reduces the potential for soil erosion. Valuable nutrients and organic material are recycled back into the soil as this material breaks down.

Researchers are also looking for gullies six inches or more in depth that develop within the CP33 buffers. Gully measurements are taken once each spring and each fall. Comparisons can

then be made to determine if the gully is actively eroding or is in the process of stabilizing or healing. Preliminary observations suggest that erosion is not a problem within the buffers studied. Even after heavy spring rains, only 24 gullies six inches or deeper were recorded in the more than nine miles of buffers that are being monitored. Information is still being collected, but observations this fall indicate that many of the gullies measured this spring are in fact stabilizing. Preliminary information suggests that the reduced seeding rates within CP33 buffers adequately protect soil and water resources and provide the bare ground required by quail.

Did You Know???

Since 2004 the Missouri Department of Conservation has completed approximately 70,000 acres of quail friendly work each year on conservation areas. On areas throughout the state, staffs have been busy conducting prescribed burns, light disking fields, controlling invasive species, planting food plots, and restoring natural communities such as glades, savannas, woodlands and prairies - all to the benefit of bobwhite.

Food Plot Establishment Secrets

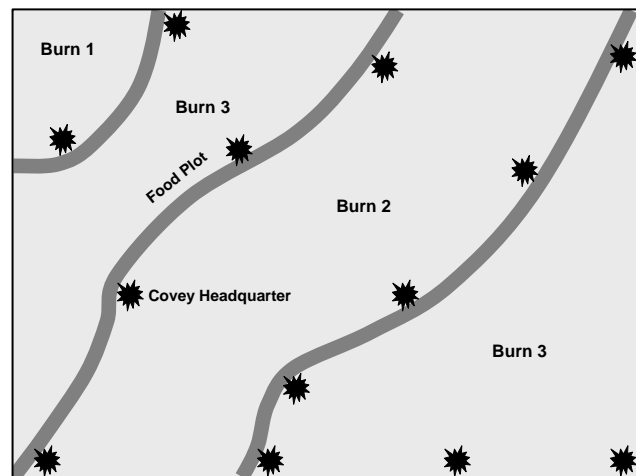
Aaron P. Jeffries, Upland Game Coordinator, Jefferson City, MO

Many people believe food plots are essential to increase quail numbers. The fact is, quail don't need food plots to survive and you don't need to plant food plots to have a lot of quail on your property. What habitat you provide on the rest of your farm will have a greater impact on your quail population than food plots. If you have done a good job of creating shrubby, nesting and brooding cover then food plots may enhance your management efforts. Food plots alone can't make poor habitat, good habitat.

Establishing food plots is a fun activity and they can be beneficial to wildlife. However, food plots should not take the place of good habitat management on the rest of the farm. Only after you have taken the time to create good nesting, brooding and shrubby cover should you start to think about planting food plots. When you establish new food plots, take a little time to plan out the locations so wildlife and you get the maximum benefit from your hard work. Here are some tips to consider when establishing food plots. Check out the Food Plot Job Sheet at www.mo.nrcs.usda.gov/technical/forms/wildlife.html for additional information and seeding rates.

Site Selection

- Food plots must be located within 70 feet of shrubby cover for quail.
- Create long linear food plots to divide large fields into smaller management units. Doing so, will help provide a variety of habitat types adjacent to each other. Consider establishing covey headquarters or downed tree structures along the edge of the food plots to provide shrubby cover (see figure). Disk firebreaks around the new covey headquarters before burning.
- Avoid areas where erosion is a concern. Select a level area and always plant on the contour.
- Food plots should be at least 30 feet wide. Wider is better so you can idle half of the plot every year.



In this example, 3 food plots are added to a field to create 4 smaller management units (Rx burn units). Thirteen covey headquarters were also planted to provide additional shrubby cover for quail.

Establishment

- No-till is best. In the spring, spray the plots with glyphosate to burndown any existing vegetation. If needed, mow the plot before planting. The residue left by practicing no-till will harbor insects and other beneficial invertebrates – the stuff baby quail eat during the summer. Research has shown that conventional tilled crop fields have significantly fewer insects than fields where no-till is practiced. The same would also apply to food plots. If you disk the plot, don't pulverize the ground. Leave some residual plant material. One or two passes should be enough. If you "clean till" the plot, do not use herbicides on the plot or use selective herbicides.
- Make sure to take a soil test, and lime and fertilize accordingly.
- Trees along the edge of a food plot will significantly reduce production. You should also realize that trees along the south and west side of a food plot will have a greater impact on the plot than those on the north or east side. You can fix this by edge feathering the trees along the edge of the food plot. See the Edge Feathering Job Sheet at www.mo.nrcs.usda.gov/technical/forms/wildlife.html for more information.

Crop Choices

- I prefer forage sorghum, Egyptian wheat and milo in my food plot buffets. I usually mix forage sorghum with milo to hide the milo from deer. Millets are also a good choice, especially for late planted food plots (June – July).
- Corn, sunflowers and soybeans are a good second choice but raccoons and deer love them all. These food plots should be ¼ acre or larger if you want any grain to remain for the winter.
- I usually avoid any specialty mixes, even deer mixes. I can make my own mixes at the store.

- Don't overlook the value of winter wheat as a quail food plot. Not for the green browse or the seed, but for the great brooding cover and stand of ragweed and weeds you will have the next summer.
- Plant only the amount of seed needed. Most people plant food plots way too thick and end up with green growth and very little grain. If the rate says 15 lbs per acre, use 15 pounds. I'd even consider cutting the rate in half!

Management

- Generally, I avoid using herbicides on food plots. A weedy plot is better for quail than a clean, weed free food plot. However, sometimes herbicides are needed to guarantee a crop. If possible, try to use a selective herbicide or a reduced herbicide rate to leave some weeds in the plot. For example, in a soybean plot consider using a grass herbicide to control grasses like foxtail. By the end of the year you will have a good stand of beans with lots of ragweed, water hemp and pigweed – all good quail foods.
- "Flip flop your food plot". Make your food plots at least 60 feet wide. Instead of planting the entire plot each year, only plant one half and leave the other half idle. The idle half will provide nesting and brooding cover and great roosting cover in the fall and winter. The next year, plant the idled half and leave the other half idle. If your plots are small, leave the entire plot idle for a year and just rotate among food plots.
- Every 3 or 5 years plant plots to alfalfa or annual lespedeza. Adding a legume to your food plot rotation will help build soil fertility and provide good brooding cover and food. I usually overseed all my winter wheat plots with annual lespedeza or alfalfa.

Spring Covey Headquarters Calendar

March

Plant covey headquarter shrubs now through mid-May
 Complete native warm-season grass burns by March 15
 Finish edge feathering and timber stand improvement projects
 Spray fescue and brome in fencelines and woody draws as it turns green
 Enroll your low-yield field edges into a continuous CRP practice – visit your local FSA office for details

April

Bobwhite quail begin calling
 DO NOT burn thick, rank stands of native warm-season grass (fall and winter burns are preferred for quail)
 Burn fescue and brome to severely stunt grass, then light disk and interseed legumes

May

Quail are nesting – stay off your mowers!
 Plant food plots now for best results
 Seed shrub lespedeza at 8lbs/acre

Did You Know???

A North Carolina State University study found 4 times as many quail in un-mowed field borders, ditches and roadsides than in the same habitats that were mowed. Missouri has also found that CRP mowing greatly reduces the suitability of a field for quail. Resist the temptation to mow for cosmetic reasons because quail don't like pretty! They like it rough.

Build it and they will come...

When Rick Scruggs first purchased his 172 acre Linn county farm in 1998, he was a non-resident landowner from Kansas. Rick and family enjoyed coming to their "getaway" in Missouri primarily for deer hunting and a little fishing, but he also enjoyed having bobwhite quail and wanted to increase the number of coveys from the few scattered birds he was seeing on the farm. It didn't take long for Rick to realize that the fescue CRP which encompassed most of the farm really wasn't very good for wildlife – especially that single covey of quail. In 2001 he called MDC Private Land Conservationist Steve Fisher for assistance. During an initial onsite visit, Steve offered suggestions for improving not only the deer habitat, but habitat for turkey, quail, songbirds, and

other small game as well. Although the information seemed overwhelming, it was clear to Rick that good habitat doesn't just happen. In many cases it's a byproduct of other land uses and it takes equipment and elbow grease. Rick knew that being a good land manager was going to take commitment.

Shortly after that initial visit Rick purchased some necessary equipment and worked with Steve to develop a management plan to improve the habitat for upland game. After just a little encouragement, he took the ball and ran. He quickly increased the acres of annual food plots to the maximum allowed on his CRP contract and began a program of rotating plots for better diversity. He left some plots idle during the growing season to grow up in weeds for quail and turkey brood rearing areas. In others, he found and experimented with types of seed not readily available through MDC or local sources. Eventually, Rick educated himself and became comfortable enough to purchase additional equipment and undertake the farming operations on the cropland portion of his farm.

Like many other quail managers, Rick found that achieving the right amount of bare ground, litter, and clumpy vegetation was the biggest challenge. To help manage the excessively thick fescue and brome Rick experimented with prescribed burning - but after a close call with poor firebreaks, soon turned his attention toward strip disking and herbicide applications. These allow him to accomplish similar objectives with less help from others. He also learned that herbicide applied at the right time can effectively eliminate thick grass beneath desirable shrubby cover without destroying the upright woody canopy.

A few years later Rick decided to add even more diversity, and worked with Steve to convert about 35 acres of fescue to a more wildlife friendly mix of native warm-season grasses and forbs. He witnessed more quail and increased quail use early in the establishment period, due to the more suitable, upright and open cover of the weeds and warm-season grasses. In fact, fields that were sprayed, burned off, and seeded had quail nesting in areas with residual pockets of dead litter (missed by the fire), sparse weed growth, and lots of bare ground. Later in the summer the new nesting, roosting, and brood-rearing cover was also providing bedding areas and browse for deer. Wildlife responded so well to the new seeding that Rick decided to establish another 20 acres the following year.

Rick realizes the value of adequate woody cover and has begun working on various fencerows and woodland edges near his other habitat improvements. Using edge feathering and downed tree structures, he can place cover in locations that lack natural low growing shrubs. He understands the value of dense, low growing shrubby cover for quail – especially the need to be open at ground level **without a carpet of grass underneath**.

After several years of persistent habitat management Rick now has at least 7 coveys - and he isn't done. Quail need annual disturbance to make them thrive. With the amount of rainfall we receive here in north Missouri, it only takes a few years for an ideal, open stand of grass to become a gnarly mess that upland game can't use. Quail enthusiasts must continually "reset" vegetation back to bare ground in order to optimize quail habitat and covey numbers. **Steve Fisher, Private Land Conservationist, Brookfield, MO**

Think Big, Start Small, Just Start!

Scott Roy, Private Land Conservationist, Trenton, MO

All too often we make excuses as to why we can't get a specific task accomplished. It is human nature and I'm guilty myself. We're more apt to undertake a project if it is one that we believe in and there is a well defined goal and even a plan. I have worked with many landowners who had the desire to restore their farm into a haven for quail. A plan was developed, funds secured, and then somewhere along the line motivation was lost. There are legitimate reasons that delay us, but more often than not I think individuals become discouraged because they aren't seeing the results they expect or they begin to feel overwhelmed so the effort is abandoned. So, how do we overcome these things?

One thing I have learned about quail is that they are pretty responsive to a small amount of effort as long as it is done in their best interest. All too often both habitat planners and landowners get caught-up in the "bigger is better" philosophy when actually "a little bit goes a long way" is a more realistic and effective strategy. Don't get

me wrong... I am a proponent of "thinking big" because it fuels the fire. However, scrambling to achieve unrealistic objectives leads to undue stress, disillusionment, and sometimes ultimate failure.

Here is a great case in point. Last fall I sprayed a small area of pasture behind my barn of about 100 feet by 200 feet with the intent of plowing it up and turning it into a horse arena for my daughters this spring. Well, time got away, presumably because of one of my standard excuses, and before I knew it the area was overtaken by the usual run of annual weeds. However, the weeds coupled with the good fortune of an adjacent crop field and woody cover provided by a locust tree I cut down for firewood about three years ago that never got cut up for fuel wood resulted in a couple of quail pairs taking a liking to the area. I just couldn't bear to bring myself to plow it under. Now, mind you, this was all haphazard. I had no intent on doing anything specifically for quail. In hindsight, though, I strongly suspect spraying and the neglected locust tree were key missing links that enticed the birds.

Another example deals with a landowner I have been working with for the past two years. Don had five acres out of his sixty-two that he was willing to manage for quail. For some this may not seem like too big of a project to tackle. But for Don, realizing his limited time and resources, it was what he felt he could reasonably handle, even though I was trying to convince him to do more. Over the last two years food plots were created, broom pasture converted to warm season grass, woody covey headquarters planted, and areas sprayed and idled. By chipping away at his plan, one project at a time, perhaps he accomplished more than if he'd tried to complete the whole thing at one time.

If you have the drive, desire, and resources to tackle the whole plan all in one year, by all means go for it! I have worked with landowners who have done such and all I can say is I had to get out of their way to keep from getting run over. Keep in mind, however, it's human nature to over commit ourselves, and we sometimes bite off more than we can chew. Bottom line is to be realistic in what can be accomplished and to do it well. Take a look at your calendar and mark one day or two out of the month when you can give full attention to your project. Completing several small projects over time provides a sense of accomplishment which is a good motivator to get out and do more in the future.

Quail are easy to please as long as you keep in mind what they need. It doesn't take a lot of time or money and the projects do not have to be on a large scale. Spray along your fencerows in the late fall to kill out the grass, drop a few trees to create shrubby areas, disc up a food plot here and there, or just let some annual weeds come-up when you "... just don't have the time." It's all beneficial. Do a little each year and soon you will have a lot. Remember think big, start small... just start!

Did You Know???

Panoramic 2SL and **Plateau** herbicides are now available to landowners. Both products can be used during native warm-season grass establishment. They can also be used to set-back cool-season grasses that have invaded established native warm-season grass stands. Check with your local agri-service dealer for product availability. Read and follow all label directions before use.

Mark Your Calendar

Prescribed Burn Workshops

March 1, 2008, 9:00AM - USDA Service Center in Macon, Contact Ted Seiler at 660-385-2616 ext. 3 to register

March 29, 2008, 9:00AM - USDA Service Center in Moberly, Contact Ted Seiler at 660-385-2616 ext. 3 to register

April 4, 2008, 9AM to Noon - Blind Pony Conservation Area in Sweet Springs, demonstration burn to follow. Demo burn should be over by 3PM. Lunch is provided and you must register by calling Brent Vandeloecht at 660-886-7447 by April 1.

Southeast Missouri Wildlife and Forest Management Workshop

- Where?** Three Rivers Community College - Tinnin Center, Poplar Bluff, MO
When? Saturday, March 15, 2008; 9AM – 3:30PM Registration 7:30 -9:00AM
Who? Landowners and Farmers up to 160 participants
- What?** You can choose from 16 different one hour presentations on a variety of conservation topics that pertain to your land. Techniques and tips from the top authorities on many subjects like deer management, wild turkey needs, forest health and management, pond fishing enhancement, small game habitat, managing WRP land, cost share options and addressing trespassing problems. Many sessions will be given twice to allow maximum attendance.

Pre-registration is required and lunch will be provided

For more information and to register - before March 7, please call the Southeast Regional office in Cape Girardeau at 573-290-5730.

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